



About Us » Water Resources »

Groundwater

About 10 percent of the Las Vegas Valley's water comes from groundwater, which is a water supply under the Earth's surface. In these areas, water fills the spaces throughout porous bedrock, alluvial gravels, sands, silts and clays to form a natural reservoir.

Groundwater occurs as part of the hydrologic cycle, which is the movement of water between the earth and the atmosphere through evaporation and precipitation. The underground area where groundwater exists is referred to as an aquifer.

Primary producing aquifers

Groundwater comes from three major aquifer zones (underground rock or sediment that is permeable and can conduct water) located and situated from 300 to 1,500 feet below land surface. This drinking-water supply is protected from surface contamination by a layer of sand and fine-grained sediments throughout most of the Las Vegas Valley.

Shallow groundwater system

Occasionally, news reports mention that contaminants such as pesticides and fertilizers have been found in groundwater. This shallow groundwater system, water that occurs within 50 feet of land surface. It is separated from the primary producing aquifers by thick clay. This water is not used for drinking water.

Who uses groundwater?

Residents using community and domestic wells rely on groundwater 100 percent of the time to meet their water needs. There are many water providers in the Valley that provide groundwater year-round to residents and other users who aren't on a municipal water supply.

The Water District pumps groundwater from wells to meet peak summer demand. During the hot summer months from May through September, 39 percent of the valley's daily water supplies.

Visit LasVegasGMP.org for more details about groundwater in the Las Vegas Valley.